Accelerated Development and Deployment of Combined Heat and Power The ADD CHP Process: From Start to Finish

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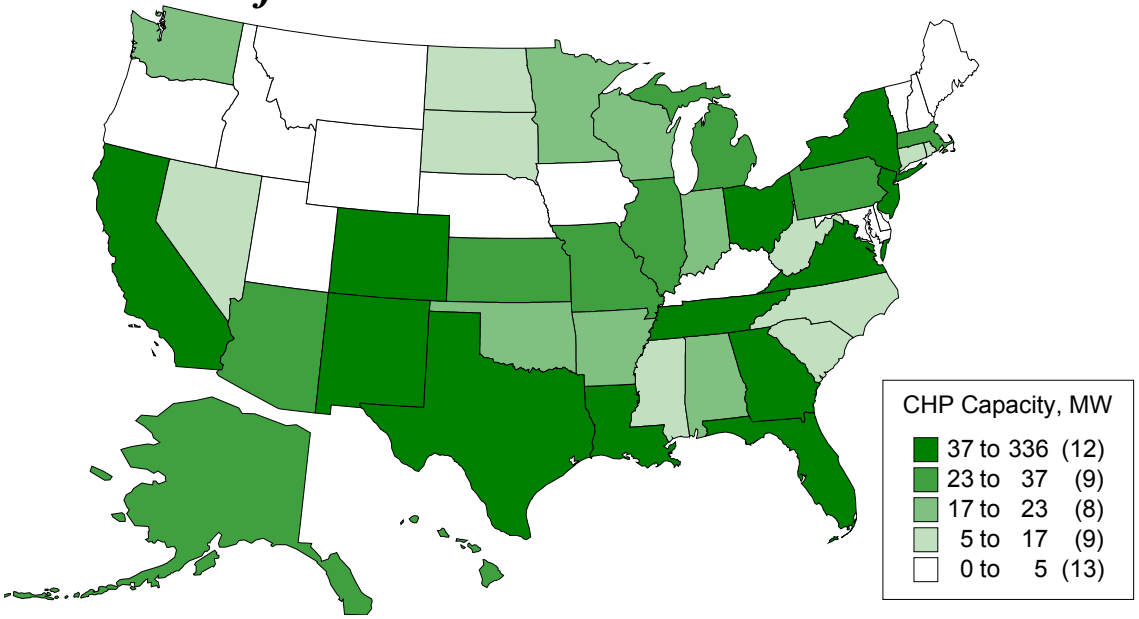
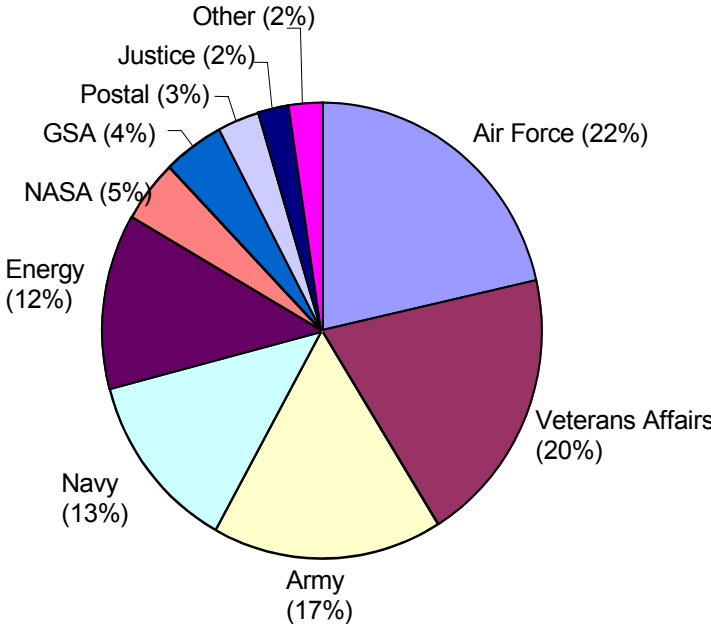
CHP Potential in Federal Facilities 1500MW

Distribution of CHP Potential at Federal Sites--over 1500 MW





- ✓ $170 million/year in energy cost savings
- ✓ Avg. return on investment <8 years
- ✓ 50 trillion Btu/yr of source energy savings
- ✓ 4 million metric tons/yr of avoided CO2
- ✓ Increase reliability/security representing 13% of total federal electricity purchased (2000)

Full report online at www.ornl.gov/femp/pdfs/chp_market_assess.pdf

ADD CHP Process

- Ten-step process to determine CHP feasibility and implementation at a Federal facility
- Collaboration between Oak Ridge National Laboratory and DOE Regional Offices
- At present, no cost to the site (provided as a service of FEMP)

ADD CHP Process

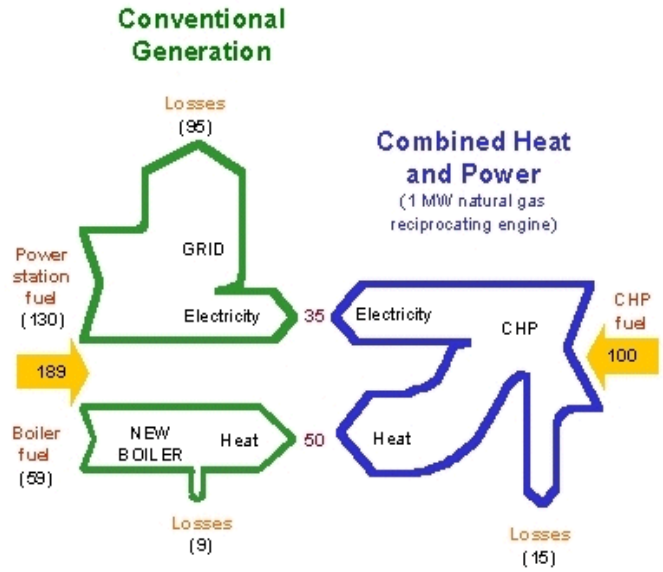
- Step 1: Federal Agency Requests CHP Feasibility Assessment Audit from RO
- Step 2: Collect Baseline Information
  - *Facility Energy Baseline Development*
- Step 3: Lab or contractor notification by RO on site selection

ADD CHP Process

- Step 4: ADD CHP by ORNL
  - *CHP Economic Analysis and Conceptual Engineering Design*
- Step 5: Screening report to site and DOE Regional Office
- Step 6: Site Kick-off Meeting
- Step 7: Determine CHP Feasibility
  - Yes – consider CHP
  - No – consider efficiency upgrades

ADD CHP Process

- Step 8: Implementation
  - Financing options
  - Design development
  - *Other Development Considerations*
  - *CHP Project Site Plans*
- Step 9: Project Construction
  - Permits
  - Utility Coordination
- Step 10: Documentation
  - Case Study, Outreach



More Information

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